Claims

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- 1. A radio transmitter device in which data indicating a transport format combination is coded and combined with content data for incorporation in a radio packet, the device being operable to include in a radio packet for a full-rate channel a code selected from a set which relates transport format combination data to codes, the codes having more bits than and identifying the corresponding transport format combination data, and operable in a mode in which data is transmitted on a channel at a lesser rate than in the full-rate channel to include in a radio packet coded transport format combination data constituting a part less than the whole of a code selected from the set of codes.
- 2. A device as claimed in claim 1, including a flexible layer one (403).
- 15 3. A device as claimed in claim 1 or claim 2, in which the coded transport format combination data in the lesser-rate mode comprises a number of bits equal to or substantially equal to the number of bits in the full-rate code multiplied by the ratio of the bit rate of the lesser-rate channel to the full-rate channel.
- 4. A device as claimed in any preceding claim, in which the coded transport format combination data for the lesser-rate channel forms a central segment of a code selected from the set.
- 5. A radio transmitter device in which data indicating a transport format

 combination is coded and combined with content data for incorporation in a radio
 packet, the device being operable to include in a radio packet for a full-rate channel
 an amount of coded transport format combination data which gives rise to a
 particular ratio of the performance of the coding of the transport format
 combination data to the performance of the coded content data, and operable in a

 mode in which data is transmitted on a channel at a lesser rate than on a full-rate
 channel to include in a radio packet an amount of coded transport format
 combination data which gives rise to a ratio of the performance of the coding of the

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transport format combination data to the performance of the coded content data which is at a similar level to the ratio in the full-rate channel.

6. A device as claimed in claim 5, including a flexible layer one (403).

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- 7. A device as claimed in any preceding claim, comprising an interleaver (411) for interleaving the coded transport format combination data with the coded content data.
- 10 8. A mobile telephone comprising a radio transmitter device as claimed in any preceding claim.
 - 9. A base transceiver station comprising a radio transmitter device as claimed in any of claims 1 to 8.
 - 10. A method of operating a radio transmitter in which data indicating a transport format combination is coded and combined with content data for incorporation in a radio packet, the method comprising including in a radio packet for a full-rate channel a code selected from a set which relates transport format combination data to codes, the codes having more bits than and identifying the corresponding transport format combination data, and, in a mode in which data is transmitted on a channel at a lesser rate than in the full-rate channel, including in a radio packet coded transport format combination data constituting a part less than the whole of a code selected from the set of codes.
 - 11. A method of operating a radio transmitter in which data indicating a transport format combination is coded and combined with content data for incorporation in a radio packet, the method comprising: including in a radio packet for a full-rate channel an amount of coded transport format combination data which gives rise to a particular ratio of the performance of the coding of the transport format combination data to the performance of the coded content data, and, in a mode in which data is transmitted on a channel at a lesser rate than on a full-rate channel, including in a radio packet an amount of coded transport format

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combination data which gives rise to a ratio of the performance of the coding of the transport format combination data to the performance of the coded content data which is at a similar level to the ratio in the full-rate channel.